

CLAIMS

1. A closure device for closing a tubular neck (3) of a receptacle (2), in particular a substantially cylindrical neck of a bottle, the closure device comprising firstly a tubular cap (20) for closing the neck, provided internally with a skirt (24) for bearing in leaktight manner against an outer zone (62) of the lip (6) of the neck and provided with means (23) enabling it to be releasably connected to the neck, and secondly a membrane (10) for covering the lip of the neck in hermetic manner and provided with peelable means (12) for securing it to the lip of the neck, and adapted to cover only an inner zone (61) of the lip of the neck that is distinct from said outer zone (62), the device being characterized in that the skirt (24) for bearing against the outer zone (62) of the lip (6) is plastically deformable between a first configuration in which it presents a generally cylindrical shape on the same axis as the cap (20), and a second configuration in which it flares towards the open end of the cap, and in that the inside face of said skirt (24) presents a first surface (244) for transmitting a bearing force (F_2) associated essentially with said skirt in said second configuration co-operating with the lip (6) of the neck (3).
2. A device according to claim 1, characterized in that the cap is provided internally with retaining means (246) for retaining the membrane (10) inside the cap (20) before the membrane is secured to the lip (6) of the neck (3).
3. A device according to claim 2, characterized in that the retaining means (246) for retaining the membrane (10) are carried by the inside face of the skirt (24) for bearing against the outer zone (62) of the lip (6).

4. A device according to any preceding claim, characterized in that the maximum radial dimension of the membrane (10) is adapted to be less than the outside diameter (D_6) of the lip (6) of the neck (3).

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5. A device according to any preceding claim, characterized in that a portion (26) of the end wall (21) of the cap (20) is covered in an adhesive substance (261) adapted to hold the membrane (10) to the end wall of the cap prior to the membrane being secured to the lip (6) of the neck (3).

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6. A device according to any preceding claim, characterized in that the bottom face of the skirt (24) for bearing against the outer zone (62) of the lip (6) presents a second surface (243; 243') for transmitting a bearing force (F_1) associated essentially with the co-operation between the releasable connection means (23) of the cap (20) and the corresponding means (5) of the neck (3).

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7. A device according to claim 6, characterized in that the second transmission surface (243') is carried by a deformable annular bead (249) projecting radially from the inside face of the skirt (24) for bearing against the outer zone (62) of the lip (6).

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8. A device according to claim 6 or claim 7, characterized in that the first and second transmission surfaces (244 and 243; 243') are distinct from each other.

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9. A device according to claim 8, characterized in that the first and second transmission surfaces (244 and 243; 243') are separated by a concave surface (245).

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10. A device according to any preceding claim,
characterized in that the cap (20) is also provided
internally with a skirt (25) for bearing against the
membrane (10) when securing the membrane to the inner
5 zone (61) of the lip (6), said skirt being disposed
radially inside the skirt (24) for bearing against the
outer zone (62) of the lip and being situated, when the
cap is connected to the neck (3), substantially in
register with the inner zone of the lip.

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11. A device according to claim 10, characterized in that
the skirt (25) for bearing against the membrane (10) is
flexible so that once the membrane (10) has been
separated, the skirt bears against the inner zone (61) of
15 the lip (6) of the neck (3) when the cap (20) is
connected to the neck.

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12. A leaktight receptacle (2) having a neck (3) for
pouring out the content from the receptacle, together
with a closure device (1) for closing the neck, the
closure device being in accordance with any preceding
claim.